1.   A data processing system for managing an exchange between an entity specifying a manufacturing task and a plurality of manufacturing facilities, the data processing system comprising:

first processing means for determining parameters of the manufacturing task;

second processing means for calculating an estimated cost of completing the manufacturing task and an estimated delivery schedule for a product of the manufacturing task on the basis of the parameters of the manufacturing task; and

third processing means for monitoring the progress of at least the specified manufacturing task.

2.   A data processing system according to Claim 1, comprising fourth processing means operable to monitor the capabilities and manufacturing schedules of at least some of the manufacturing facilities in real time.

3.   A data processing system according to Claim 1, comprising fifth processing means operable to provide on-line maintenance and support for the manufacturing task.

4.   A data processing system according to Claim 3, wherein the on-line maintenance and support include at least one of: emergency support; technical support; training; supply of spare parts; supply of software; and correction of software.

5.   A data processing system according to Claim 1, comprising sixth processing means operable to generate output relating to the progress of the manufacturing task.

6.   A data processing system according to Claim 1, further comprising storage means for storing information relating to each of the manufacturing facilities.

7.   A data processing system according to Claim 6, wherein the stored information relating to each of the manufacturing facilities includes past performance of the manufacturing facilities.

8.   A data processing system according to Claim 1, further comprising seventh processing means for receiving data specifying the manufacturing task from the entity and for analysing the data to determine the parameters of the manufacturing task.

9.   A data processing system according to Claim 1, wherein the parameters include at least one of: a material from which an item is to be made; the dimensions of the item; the function of the item; identification of a component to be included in the item, identification of tools required to produce the item; insurance requirements; warehousing requirements; identification of an existing machine with which the item must operate; details of software that must be created or customised for use with the item; identification of spare parts to be manufactured for use with the item; details of on-line maintenance and support required for the item; identification of software to be used in the production of the item; and which of the manufacturing facilities may be used in production of the item.

10.   A data processing system according to Claim 1, wherein the exchange is managed between the entity specifying a manufacturing task, the plurality of manufacturing facilities, and at least one of: a supplier of materials; a supplier of machinery; a licensor of software; a provider of software; a supplier of spare

parts; a supplier of warehousing facilities; a supplier of transport services; a supplier of banking services; and a supplier of insurance services.

11. A data processing system according to Claim 1, further comprising eighth processing means for allowing a further manufacturing facility to join the exchange.

12. A data processing system according to Claim 1, further comprising ninth processing means for planning a set of manufacturing steps that are required to perform the manufacturing task.

13. A data processing system according to Claim 1, further comprising tenth processing means for communicating with a selected supplier of materials and requesting the delivery of materials to a selected manufacturing facility.

14. A data processing system according to Claim 1, further comprising eleventh processing means for providing computer-aided design facilities, computer-aided manufacturing facilities or computer-aided engineering facilities to the entity to allow the entity to further specify the manufacturing task.

15. A data processing system according to Claim 1, wherein the data processing system is located on a server connected to a network.

16. A data processing system according to Claim 15, wherein the data processing system communicates with the entity and with each of the manufacturing facilities over the network.

17.   A data processing system according to Claim 15, wherein the network is the Internet.

18.   A data processing system according to Claim 1, wherein the first, second and third processing means are the same processing means.

19.   A system comprising a plurality of data processing systems according to Claim 1, comprising means to allocate manufacturing tasks specified by entities associated with each of the data processing systems to manufacturing facilities associated with others of the data processing systems.

20.   A system according to Claim 19, wherein the allocation of manufacturing tasks among the manufacturing facilities associated with others of the data processing systems is based upon the geographical location of the manufacturing facilities.

21.   A system according to Claim 19, wherein the allocation of manufacturing tasks among the manufacturing facilities associated with others of the data processing systems is based upon parameters of the manufacturing task.

22.   A method of managing an exchange between an entity specifying a manufacturing task and a plurality of manufacturing facilities, the method comprising the steps of:

determining parameters of the manufacturing task;

calculating an estimated cost of completing the manufacturing task and an estimated delivery schedule for a product of the manufacturing task on the basis of the parameters of the manufacturing task; and

monitoring the progress of at least the specified manufacturing task.

23. A method according to Claim 22, comprising the step of monitoring the capabilities and schedules of at least some of the manufacturing facilities in real time.

24. A method according to Claim 22, comprising the step of providing on-line maintenance and support for the manufacturing task.

25. A method according to Claim 24, wherein the step of providing on-line maintenance and support comprises the step of providing at least one of: emergency support; technical support; training; supply of spare parts; supply of software; and correction of software.

26. A method according to Claim 22, comprising the step of generating output relating to the progress of the manufacturing task.

27. A method according to Claim 22, further comprising the step of storing information relating to each of the manufacturing facilities.

28. A method according to Claim 27, wherein the step of storing information relating to each of the manufacturing facilities comprises the step of storing information relating to past performance of the manufacturing facilities.

29. A method according to Claim 22, further comprising the steps of:
    receiving data specifying the manufacturing task from the entity; and
    analysing the data to determine the parameters of the manufacturing task.

30. A method according to Claim 22, wherein the parameters include at least one of: a material from which an item is to be made; the dimensions of the item; the function of the item; identification of a component to be included in the item, identification of tools required to produce the item; insurance requirements; warehousing requirements; identification of an existing machine with which the item must operate; details of software that must be created or customised for use with the item; identification of spare parts to be manufactured for use with the item; details of on-line maintenance and support required for the item; identification of software to be used in the production of the item; and which of the manufacturing facilities may be used in production of the item.

31. A method according to Claim 22, wherein the exchange is managed between the entity specifying a manufacturing task, the plurality of manufacturing facilities, and at least one of: a supplier of materials; a supplier of machinery; a licensor of software; a provider of software; a supplier of spare parts; a supplier of warehousing facilities; a supplier of transport services; a supplier of banking services; and a supplier of insurance services.

32. A method according to Claim 22, further comprising the step of allowing a further manufacturing facility to join the exchange.

33. A method according to Claim 22, further comprising the step of planning a set of manufacturing steps that are required to perform the manufacturing task.

34. A method according to Claim 22, further comprising the step of communicating with a selected supplier of materials and requesting the delivery of materials to a selected manufacturing facility.

35. A method according to Claim 22, further comprising the step of providing computer-aided design facilities, computer-aided manufacturing facilities or computer-aided engineering facilities to the entity to allow the entity to further specify the manufacturing task.

36. A method according to Claim 22, wherein the method is implemented on a data processing system located on a server connected to a network.

37. A method according to Claim 36, wherein the data processing system communicates with the entity and with each of the manufacturing facilities over the network.

38. A method according to Claim 36, wherein the network is the Internet.

39. A method according to Claim 22, wherein the steps of the method are carried out by a single processing means.

40. A method comprising the steps of:

managing a plurality of exchanges in accordance with the method of Claim 22; and

allocating manufacturing tasks specified by entities associated with each of the exchanges to manufacturing facilities associated with others of the exchanges.

41. A method according to Claim 40, wherein the allocation of manufacturing tasks among the manufacturing facilities associated with others of the exchanges is based upon the geographical location of the manufacturing facilities.

42.   A method according to Claim 40, wherein the allocation of manufacturing tasks among the manufacturing facilities associated with others of the exchanges is based upon parameters of the manufacturing task.